

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: KATO, et al.
Application No.: 09/766,596
Filed: January 23, 2001
For: VACUUM PROCESSING APPARATUS AND OPERATING
METHOD THEREFOR
Group Art Unit: 3749
Examiner: P. Wilson

**INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.97 & 1.98**

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

July 8, 2004

Sir:

Pursuant to Applicants' duty to disclosure, enclosed please find documents for consideration by the Examiner during further examination of the above-identified application. Also enclosed is a Form, substantially equivalent to Form PTO-1449, listing the enclosed documents.

This Information Disclosure Statement is being submitted subsequent to issuance of a Notice Of Allowance in the above-identified application, which Notice of Allowance must be withdrawn and a new Notice of Allowance issued in light of the Petition filed September 12, 2003. Since, upon withdrawal of the aforementioned Notice of Allowance, no Office Action has been issued in the present application, filing of these documents herewith satisfy 37 CFR § 1.97(b)

In any event, the following Statement is made under 37 CFR §1.97(e):

No item of information contained in this Information Disclosure Statement was cited in any communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this Information Disclosure Statement was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

The following additional comments are made in connection with the enclosed documents.

Enclosed U.S. Patent No. 5,536,128 corresponds to Japanese Patent Document (Laid-Open) No. H2(1990)-117512. In the modified embodiment 19 in column 29 of this patent, there is a description about a preferred embodiment for supplying a wafer to the processing device 60 (note Fig. 47) under application of a cassette. It is respectfully submitted, however, that this patent has no description at all about a technical concept according to the present invention that the wafer can be taken out of any position within a plurality of cassettes and it can be returned back to this original position of the original cassette, upon completion of the processing. In addition, other embodiments as described in this patent do not have a description of the processed wafer being returned back to the original position of the original cassette. Furthermore, No. 5,536,128 has no description at all about a concept that the processing device 60 has a plurality of chambers.

The article entitled "Parallel-Implantation Ion Implantation Device" has a description, with regard to an end station, that wafers taken out from the respective cassettes will be returned to the positions where they have been first taken out after the completion of implantation processing. Note page 54 of this article and Fig. 10.

However, it is respectfully submitted that the system disclosed in this article has only one processing chamber. In addition, this article has a description saying that the wafers are taken out in sequence from the lowest stage slot of the load carrier by the atmospheric loader, and it is respectfully submitted that the device disclosed in the article is not a configuration in which the wafer can be taken out from any location within a plurality of cassettes.

The enclosed article entitled "Drafts in Symposium of VLSI and FA Technology" describes, in the column of (2) Cassette Transfer on page 35, that "Each cassette is automatically controlled so that it is taken out from the cassette and is also returned to the original position in the cassette after end of etching process". However, this publication has no description saying that the wafer can be taken out from any location within a plurality of cassettes.

The enclosed Japanese Patent Document No. 64-36042, at line 12 in the left lower column in page 3, has a description saying that "the wafer is taken out from the chamber 3 at the position P1 and housed to the original position of the cassette 20". However, referring to Fig. 2 of this patent document, the structure described therein is not a configuration in which the wafer can be taken out from any location within a plurality of cassettes.

For purposes of satisfying 37 CFR §1.98(a)(3), note the foregoing discussions concerning the enclosed documents, as well as English translations/abstracts of the enclosed documents.

In view of the foregoing, it is respectfully submitted that all applicable requirements of 37 CFR §§1.97 and 1.98 have been satisfied, in connection with each of the documents listed on the enclosed Form. Accordingly, consideration of

the listed documents, upon further examination of the above-identified application, is respectfully requested.

Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to the deposit account of Antonelli, Terry, Stout & Kraus, Deposit Account No. 01-2135 (Docket No. 520.30414V22), and please credit any excess fees to such deposit account.

Respectfully submitted,
ANTONELLI, TERRY, STOUT & KRAUS, LLP

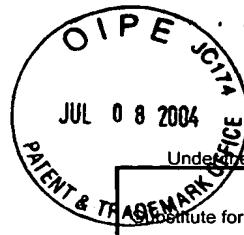
By



William I. Solomon (Reg. No. 28,565)
Attorney for Applicant(s)

WIS/btd

1300 North Seventeenth Street, Suite 1800
Arlington, Virginia 22209
Tel.: (703) 312-6600
Fax: (703) 312-6666



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Institute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

1

of

Complete if Known

Application Number	09/766,596
Filing Date	1/23/2001
First Named Inventor	Kato, et al.
Art Unit	3749
Examiner Name	P. Wilson

Attorney Docket Number **520.30414V22****U.S. PATENT DOCUMENTS**

Examiner Initials'	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
		US- 5,536,128	7/16/1996	Shimoyashiro, et al.	
		US-			
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials'	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
		JP 64-036042	2/7/1989	Kokusai Electric Co., Ltd.		

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		S. Nakagawa, "Dry Etching", Drafts in Symposium of VLSI and FA Technology, April 1985, pages 1-14	
		N. Nagai, "Parallel-Implantation Ion Implantation Device "NH-20SP""", Special Issue/Semiconductor Manufacturing Device of Half-Micron Age, pages 1-12, 3/1990	

Examiner Signature	Date Considered
--------------------	-----------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2